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ABSTRACT

The annotated bibliography on Creativity--Research/Tests & Measurements/Intelligence contains approximately 60 abstracts and associated indexing information for documents or journal articles published from 1964 to 1975 and selected from the computer files of the Council for Exceptional Children's Information Services and the Education Resources Information Center (ERIC). It is explained that titles were chosen in response to user requests and analysis of current trends in the field. Abstracts include bibliographic data (identification or order number, publication date, author, title, source or publisher, and availability); descriptors indicating the subject matter covered; and a summary of the document's contents. Also provided are instructions for using the bibliography, a list of journals from which articles were abstracted, and an order form for ordering microfiche or paper copies of the documents through the ERIC Document Reproduction Service. (PK)

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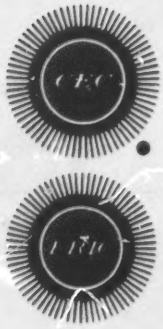

Creativity—Research/Tests & Measurements/Intelligence

A Selective Bibliography

CEC Information Services and Publications
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1920 Association Drive
Reston, Virginia 22091

Exceptional Child Bibliography Series No. 639

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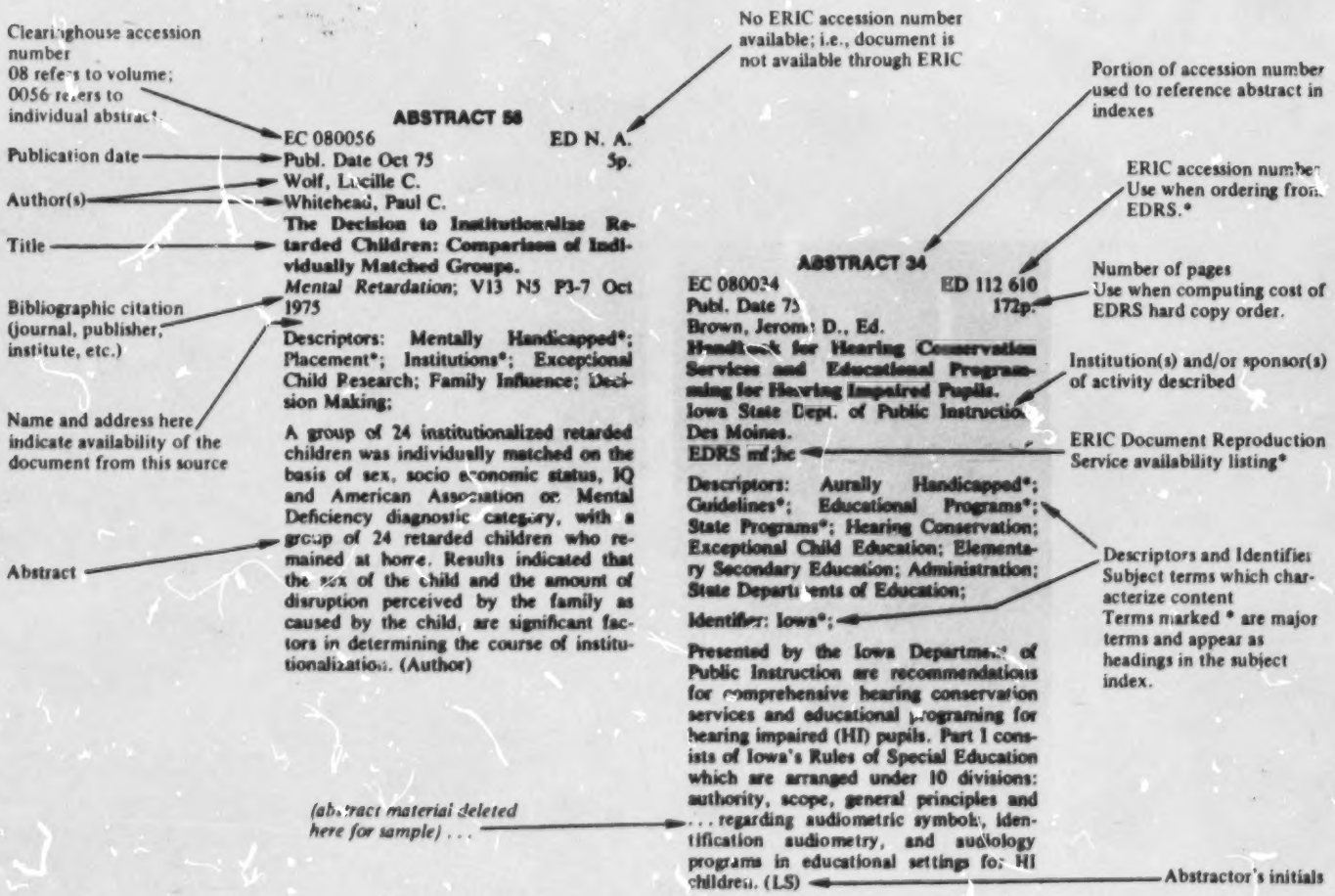
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ABSTRACT 58
EC 080056
ED N. A.
Publication date
Publ. Date Oct 75
5p.
Author(s)
Wolf, Lucille C.
Whitehead, Paul C.
Title
The Decision to Institutionalize Retarded Children: Comparison of Individually Matched Groups.
Bibliographic citation (journal, publisher, institute, etc.)
Mental Retardation; V13 N5 P3-7 Oct 1975
Descriptors: Mentally Handicapped*; Placement*; Institutions*; Exceptional Child Research; Family Influence; Decision Making;
Name and address here indicate availability of the document from this source
Abstract
A group of 24 institutionalized retarded children was individually matched on the basis of sex, socio economic status, IQ and American Association on Mental Deficiency diagnostic category, with a group of 24 retarded children who remained at home. Results indicated that the sex of the child and the amount of disruption perceived by the family as caused by the child, are significant factors in determining the course of institutionalization. (Author)
ERIC accession number Use when ordering from EDRS.*
ABSTRACT 34
EC 080024
ED 112 610
Number of pages Use when computing cost of EDRS hard copy order.
Publ. Date 75
172p.
Brown, Jerome D., Ed.
Handbook for Hearing Conservation Services and Educational Programming for Hearing Impaired Pupils.
Institution(s) and/or sponsor(s) of activity described
Iowa State Dept. of Public Instruction, Des Moines.
EDRS mf/hc
ERIC Document Reproduction Service availability listing*
Descriptors: Aurally Handicapped*; Guidelines*; Educational Programs*; State Programs*; Hearing Conservation; Exceptional Child Education; Elementary Secondary Education; Administration; State Departments of Education;
Identifier: Iowa*;
Descriptors and Identifiers Subject terms which characterize content Terms marked * are major terms and appear as headings in the subject index.
Presented by the Iowa Department of Public Instruction are recommendations for comprehensive hearing conservation services and educational programing for hearing impaired (HI) pupils. Part I consists of Iowa's Rules of Special Education which are arranged under 10 divisions: authority, scope, general principles and
(abstract material deleted here for sample) . . .
. . . regarding audiometric symbols, identification audiometry, and audiology programs in educational settings for HI children. (LS)
Abstractor's initials

CEC Information Center Journal Collection

The CEC Information Center regularly receives more than 200 journals which are examined for material concerning exceptional children. Articles judged to meet established criteria are abstracted, indexed and published in *Exceptional Child Education Abstracts (ECEA)*. Some of these articles are indexed and submitted also for announcement in *Current Index to Journals in Education (CIJE)*, an Educational Resources Information Center (ERIC) publication. The following list (current May 1976) is *representative* of journals currently received.

*Academic Therapy, 1539 Fourth Street, San Rafael, California 94901

ACTA Symbolica, University of Akron, Akron, Ohio 44304

Adolescence, PO Box 165, 391 Willets Road, Roslyn Heights, New York 11577

*American Annals of the Deaf, 5034 Wiscon-
**sin Avenue NW, Washington DC 20016

American Education, 400 Maryland Avenue SW, Washington DC 20202

American Educational Research Journal, 1126 16th Street NW, Washington DC 20036

American Journal of Art Therapy, 6010 Broad Branch Road, Washington DC 20015

American Foundation for the Blind Research Bulletin, 15 West 16th Street, New York, New York 10011

**American Journal of Diseases of Children, 535 North Dearborn Street, Chicago, Illinois 60610

*American Journal of Mental Deficiency, 49
**Sheridan Avenue, Albany. New York 12210

American Journal of Nursing, 10 Columbus Circle, New York, New York 10019

**American Journal of Occupational Therapy, 6000 Executive Boulevard, Suite 200, Rockville, Maryland 20852

*American Journal of Orthopsychiatry, 1790
**Broadway, New York, New York 10019

Archives of Otalaryngology, 535 North Dearborn Street, Chicago, Illinois 60610.

Arithmetic Teacher, 1201 16th Street NW, Washington DC 20036

ASHA, 9030 Old Georgetown Road, Washington DC 20014

Audecibel, 24261 Grand River Avenue, Detroit, Michigan 48219

Auditory & Hearing Education, 15300 Ventura Boulevard, Suite 301, Sherman Oaks, California 91403

Audiovisual Instruction, 1201 16th Street NW, Washington, DC 20036

Australian Children Limited, Box 91, Brighton 5048, South Australia

*Australian Journal of Mental Retardation,
**P.O. Box 255, Carlton, South Victoria 3053, Australia

AVISO, Newark State College, Union, New Jersey 07083

**Behavior Therapy, 111 Fifth Avenue, New York, New York 10003

Behavior Today, Ziff-Davis Publishing Co., 1156 15th Street NW, Washington DC 20036

Behavioral Disorders, Council for Children with Behavior Disorders, Indiana University, Bloomington, Indiana 47401

British Journal of Disorders of Communication, 4345 Annandale Street, Edinburgh EH7 4 AT, Scotland

British Journal of Mental Subnormality, Monyhull Hospital, Birmingham B30 3QB, England

British Journal of Physical Education, Ling House, 10 Nottingham Place, London WIM 4 AX, England

Bulletin of the Orton Society, 8415 Bellona Lane, Suite 204, Towson, Maryland 20402

Bulletin of Prosthetics Research, US Government Printing Office, Washington DC 20402

*Bureau Memorandum, 126 Langdon Street, Madison, Wisconsin 53702

CSMR Bulletin, 345 Campus Towers, Edmonton, Alberta, Canada

Canada's Mental Health, Information Canada, Ottawa K1A 0S9, Canada

CEDR Quarterly, Phi Delta Kappa, PO Box 789, Bloomington, Indiana 47401

Child Care Quarterly, 2852 Broadway, Morningside Heights, New York 10025

Child Development, 5750 Ellis Avenue, Chicago, Illinois 60637

**Child Psychiatry & Human Development, 2852 Broadway, Morningside Heights, New York 10025

Child Welfare, 67 Irving Place, New York, New York 10003

Childhood Education, 3615 Wisconsin Avenue NW, Washington DC 20016

Children Today, US Government Printing Office, Washington DC 20402

Children's House, Box 111, Caldwell, New Jersey 07006

Colorado Journal of Educational Research, University of Northern Colorado, Greeley, Colorado 80631

Communication Education (formerly Speech Teacher) Speech Communication Association, Statler Hilton Hotel, New York, New York 10001

Compact, 300 Lincoln Tower, 1860 Lincoln Street, Denver, Colorado 80203

Day Care & Early Education, 2852 Broadway, New York, New York 10025

Deaf American, 5125 Radnor Road, Indianapolis, Indiana 46226

Deficience Mentale/Mental Retardation, York University, 4700 Keele Street, Downsview, Ontario M3J 1P3, Canada

Developmental Medicine and Child Neurology, Spastic International Medical Publications, 26-22 Mortimer Street, London W1N 7RD, England

Devereux Forum, 19 South Waterloo Road, Devon, Pennsylvania 19333

DSH Abstracts, Gallaudet College, Washington, DC 20002

Dyslexia Review, The Dyslexia Institute, 133 Gresham Road, Staines, TW18 2AJ England

*Education and Training of the Mentally
**Retarded, 1920 Association Drive, Reston, Virginia 22091

Education Digest, PO Box 623, 416 Longshore Drive, Ann Arbor, Michigan 48107

*Education of the Visually Handicapped, 919 Walnut St. Fourth Floor, Philadelphia, Pennsylvania 19107

Educational & Psychological Measurement, Box 6907, College Station, Durham, North Carolina 27708

Educational Forum, 343 Armory Building, University of Illinois, Champaign, Illinois 61820

Educational Horizons, 2000 East 8th Street, Bloomington, Indiana 47401

Educational Leadership, 1201 16th Street NW, Washington DC 20036

Educational Researcher, 1126 16th Street NW, Washington DC 20036

Educational Technology, 140 Sylvan Avenue, Englewood Cliffs, New Jersey 07632

Elementary School Journal, 5801 Ellis Avenue, Chicago, Illinois 60637

English Journal, 1111 Kenyon Road, Urbana, Illinois 61801

*Exceptional Children, 1920 Association
**Drive, Reston, Virginia 22091

*Exceptional Parent, 264 Beacon Street, Boston, Massachusetts 02116

Family Involvement, Canadian Education Programs, 41 Madison Avenue, Toronto, Ontario M5R 2S2, Canada

Focus on Exceptional Children, 6635 East Villanova Place, Denver, Colorado 80222

*Gifted Child Quarterly, 8080 Springvalley Drive, Cincinnati, Ohio 45236

Harvard Educational Review, 23 South Main Street, Uxbridge, Massachusetts 02138

Hearing, 105 Gower Street, London WCIE 6AH, England

*Hearing & Speech Action, 814 Thayer Avenue, Silver Spring, Maryland 20910

Hearing Rehabilitation Quarterly, New York League for the Hard of Hearing, 71 W. 23rd Street, New York, New York 10010

Human Behavior, PO Box 2810, Boulder, Colorado 80302

Humanist, 923 Kensington Ave., Buffalo, New York 14215

Illinois Schools Journal, 6800 South Stewart Avenue, Chicago, Illinois 60621

Indiana Speech & Hearing Journal, Ball State University, Muncie, Indiana 47306

Instructor, PO Box 6099, Duluth, Minnesota 55806

Inter-Clinic Information Bulletin, 317 East 34th Street, New York, New York 10016

International Child Welfare Review, 1 Rue De Varembe, 1211 Geneva 20, Switzerland

International Journal of Child Psychiatry, Verlag 10, Basel 13, Switzerland

International Rehabilitation Review, 219 East 44th Street, New York, New York 10017

Involvement, PO Box 460, Oak Ridges, Ontario, Canada

*denotes journals monitored for CIJE.
**denotes copyrighted journals for which ECEA has been granted permission to use author abstracts.

Journal for Special Educators of the Mentally Retarded, 171, Center Conway, New Hampshire 03813

*Journal of Abnormal Child Psychology, **Plenum Publishing Corp., 227 W. 17th Street, New York, New York 10011

**Journal of Abnormal Psychology, 1200 17th Street NW, Washington DC 20036

*Journal of Applied Behavior Analysis, Uni-**versity of Kansas, Lawrence, Kansas 66044

Journal of Applied Rehabilitation Counseling, 1522 K Street NW, Washington DC 20005

Journal of Association for Study of Perception, PO Box 744, De Kalb, Illinois 60115

*Journal of Autism & Childhood Schizophre-**nia, Plenum Publishing Corp., 227 W. 17th Street, New York, New York 10011

Journal of Child Psychology & Psychiatry, Pergamon Press, Elmsford, New York 10523

Journal of Clinical Child Psychology, 111 South Meramec Avenue, No. 208, St. Louis, Missouri 63105

Journal of Communication Disorders, American Elsevier Publishing Co., 52 Vanderbilt Avenue, New York, New York 10014

Journal of Community Health, Human Sciences Press, 72 Fifth Avenue, New York, New York 10014

**Journal of Consulting & Clinical Psychology, 1200 17th Street NW, Washington DC 20036

Journal of Creative Behavior, 1300 Elmwood Avenue, Buffalo, New York 14222

Journal of Developmental Disabilities, PO Box 8470, Gentilly Station, New Orleans, Louisiana 70182

Journal of Education, Department of Education, Halifax, Nova Scotia

**Journal of Educational Psychology, 1200 17th Street NW, Washington DC 20036

**Journal of Educational Research, Box 1605, Madison, Wisconsin 53701

Journal of General Education, 215 Wagner Building, University Park, Pennsylvania 16802

*Journal of Learning Disabilities, 5 North **Wabash Avenue, Chicago, Illinois 60602

Journal of Marriage & the Family, 1219 University Avenue SE, Minneapolis, Minnesota 55414

*Journal of Mental Deficiency Research, 86 Newman Street, London WIP 4 AR, England

Journal of Music Therapy, Box 610, Lawrence, Kansas 66044

Journal of Negro Education, Howard University, Washington DC 20001

**Journal of Nervous & Mental Disease, 428 East Preston Street, Baltimore, Maryland 21201

*Journal of Pediatrics, 11830 Westline Industrial Drive, St. Louis, Missouri 63141

**Journal of Personality Assessment, 1070 East Angeleno Avenue, Burbank, California 91501

Journal of Reading, 6 Tyre Avenue, Newark, Delaware 19711

Journal of Rehabilitation, 1522 K Street NW, Washington DC 20005

Journal of Rehabilitation of the Deaf, 814 Thayer Avenue, Silver Spring, Maryland 20910

Journal of School Health, American School Health Association, Kent, Ohio 44240

**Journal of School Psychology, 51 Riverside Avenue, Westport, Connecticut 06880

*Journal of Special Education, Grune and **Stratton, 111 Fifth Avenue, New York, New York 10003

*Journal of Speech & Hearing Disorders, 9030 Old Georgetown Road, Washington, DC 20014

*Journal of Speech & Hearing Research, **9030 Old Georgetown Road, Washington DC 20014

Journal of Teacher Education, One Dupont Circle, Washington DC 20036

*Language Speech & Hearing Services in Schools, 9030 Old Georgetown Road, Washington DC 20014

Lantern, Perkins School for the Blind, Watertown, Massachusetts 02172

Learning, 530 University Avenue, Palo Alto, California 94301

Mathematics Teacher, 1906 Association Drive, Reston, Virginia 22091

*Mental Retardation, 5201 Connecticut Ave-**nue NW, Washington DC 20015

Merrill Palmer Quarterly, 71 East Ferry Avenue, Detroit, Michigan 48202

Momentum, 350, One Dupont Circle, Washington DC 20036

Music Educators Journal, 1902 Association Drive, Reston, Virginia 22091

NASSP Bulletin, 1904 Association Drive, Reston, Virginia 22091

National Elementary Principal, 1801 North Moore Street, Arlington, Virginia 22209

The New Beacon, 224 Great Portland Street, London WIN/AA, England

*New Outlook for the Blind, 15 West 16th Street, New York, New York 10011

Notre Dame Journal of Education, PO Box 686, Notre Dame, Indiana 46556

Nursing Outlook, 10 Columbus Circle, New York, New York 10019

Optometric Weekly, 5 North Wabash Avenue, Chicago, Illinois 60602

Parents Voice, Journal of the National Society of Mentally Handicapped Children, Pembridge Square, London W2 4EP, England

Peabody Journal of Education, George Peabody College for Teachers, Nashville, Tennessee 37203

*Pediatrics, PO Box 1034 Evanston, Illinois **60204

**Personnel & Guidance Journal, 1607 New Hampshire Avenue NW, Washington DC 20009

Phi Delta Kappan, 8th & Union Streets, Bloomington, Indiana 47401

**Physical Therapy, 1156 15th Street NW, Washington DC 22005

Pointer, PO Box 131, University Station, Syracuse, New York 13210

Psychology in the Schools, 4 Conant Square, Brandon, Vermont 05733

Psychology Today, PO Box 2990, Boulder, Colorado 80302

Quarterly Journal of Speech, Speech Communication Association, Statler Hilton Hotel, New York, New York 10001

**Reading Research Quarterly, 6 Tyre Avenue, Newark, Delaware 19711

Reading Teacher, 6 Tyre Avenue, Newark, Delaware 19711

Rehabilitation Digest, One Yonge Street, Suite 2110, Toronto Ontario M5E 1E8, Canada

Rehabilitation Gazette, 4502 Maryland Avenue, St. Louis, Missouri 63108

*Rehabilitation Literature, 2023 West Ogden **Avenue, Chicago, Illinois 60612

Rehabilitation Teacher, 88 St. Stephen Street, Boston, Massachusetts 02115

Remedial Education, 5 Netherlee Street, Glen Iris, Victoria 3146, Australia

Review of Educational Research, 1126 16th Street NW, Washington, DC 20036

**Scandinavian Journal of Rehabilitation Medicine, Gamla Brogatan 26, Box 62, S-101 20 Stockholm 1, Sweden

Schizophrenia Bulletin, 5600 Fishers Lane, Rockville, Maryland 20852

School Media Quarterly, 1201-1205 Bluff Street, Fulton, Missouri 65251

*Sight Saving Review, 79 Madison Avenue, New York, New York 10016

Sign Language Studies, Linstock Press, 9306 Mintwood St., Silver Spring, Maryland 20901

*Slow Learning Child, St. Lucia, Brisbane 4067, Australia

**Social Work, 49 Sheridan Avenue, Albany, New York 12210

Southern Journal of Educational Research, Box 107, Southern Station, Hattiesburg, Mississippi 39401

Special Children, American Association of Special Educators, 107-20 125th Street, New York, New York 11419

*Special Education: Forward Trends, National Council for Special Education, 12 Hollycroft Avenue, London NW3 7QL, England

Special Education in Canada, Parkway V S, 1 Danforth Avenue, Toronto, Ontario, Canada

Speech Monographs, Speech Communication Association, Statler Hilton Hotel, New York, New York 10001

Teacher, 22 West Putnam Avenue, Greenwich, Connecticut 06830

Teacher of the Blind, Royal School for the Blind, Church Road North, Wavertree, Liverpool L156TQ, England

Teacher of the Deaf, 50 Topsham Road Exeter EX2 4NF, England

Teachers College Record, 525 West 120th Street, New York, New York 10027

**TEACHING Exceptional Children, 1920 Association Drive, Reston, Virginia 22091

*Volta Review, 3417 Volta Place NW, Wash-**ington, DC 20007

Young Children, 1384 Connecticut Avenue NW, Washington, DC 20009

ABSTRACT 2094

EC 005 787 ED 033 105
Publ. Date (69) 99p.
Skipper, Charles E.
A Study of the Development of Creative Abilities in Adolescence.
EDRS mf
Project Director, Living Arts Program, 612 Linden Avenue, Dayton, Ohio 45403 ($3.00).

Descriptors: exceptional child research; gifted; creative ability; creative development; creativity research; cultural enrichment; fine arts; originality; personality development; talent development; teaching methods; Living Arts Program

The purpose of this study, sponsored by an ESEA Title III grant, was to evaluate the effectiveness of the Living Arts Program in developing creative behavior in adolescents. The subjects consisted of an experimental group of 188 students in grades 7-10 who took part in the Living Arts Program for one semester and a similar group of students who did not. Each group was divided into high, middle, and low levels of creativity on the basis of scores on a Things Done On Your Own Checklist. The data obtained from tests given to these students in October 1967 and January 1968 led to the following conclusions: females in the experimental group increased their aesthetic sensitivity and engaged in significantly more independent creative activities than did those in the control group; males and females in the experimental groups participated more actively in community cultural activities than did those in the control group, and increased significantly their creative thinking; students in the experimental group reported a positive self concept and believed themselves to have considerable imagination, curiosity, and creative personal qualities. The findings appeared to substantiate the theory that deliberate efforts to improve certain types of creative behavior can be successful. (MP)

ABSTRACT 1593

EC 03 1593 ED 046 212
Publ. Date Feb 71 54p.
Strum, Irene S.
The Relationship of Creativity and Academic Risk-Taking Among Fifth Graders. Final Report.
Fordham University, Bronx, New York
Office Of Education (DHEW), Washington, D. C., Bureau Of Research
EDRS mf,hc
OEG-2-70-0006(509)
BR-9-B-141

Descriptors: creati[illegible]tive ability; risk; behav[illegible]ological characteristics; pe[illegible]ligence differences; sex differences

The relationship between two personality characteristics, creativity and risk-taking, was investigated in fifth grade students, ages 9-11 years (N equals 291). Creativity was explored by examining the factors of ideational fluency, spontaneous flexibility, originality, and elaboration. Risk-taking, studied in a classroom testing situation, was regarded as academic in nature. The relationship between the two traits was studied in terms of magnitude, direction, and differences between boys and girls. The two standardized tests employed were the Torrance Tests of Creative Thinking, Figural, Form A and the SRA Tests of General Ability (TOGA). The Wide Range Vocabulary Test by Atwell and Wells was modified to measure academic risk-taking. Analyses of variance showed no significant relationship between academic risk-taking and sex or general mental ability, and none between creative thinking ability and risk-taking among the boys, the girls, or the total sample. Results were similar for each of the creativity factors studied, as well as for the total creativity score. It was concluded that students who guess and take chances are not necessarily more creative than students who do not. (Author/KW)

ABSTRACT 2785

EC 03 2785 ED N.A.
Publ. Date 71 19p.
Adams, Leslie
Research in Creativity.
EDRS not available
Kansas Studies in Education; V21 N1/2 P60-78 Spr/Sum 1971

Descriptors: exceptional child research; gifted; creativity research; creativity; research reviews (publications)

A synthesis of research in creativity, the article is limited to studies done after 1950 and more to empirical investigations than to d courses. Categories, arranged in chronological order, are concerned primarily with studies carried on independently by diverse personnel, and include music and the arts and music education, education and educational psycholoy, and visual arts and art education. A summary presents impressions of the different types of research which aremost prominent, the areas receiving attention, and the direction in which the research seems to be movi[illegible] (RJ)

ABSTRACT 276

EC 04 0276 ED N.A.
Publ. Date Apr 71 7p.
Gaier, Eugene L.; Dellas, Marie
Concept Formation and Creativity in Children.
EDRS not available
Theory Into Practice; V10 N2 P117-23 Apr 1971

Descriptors: exceptional child research; research reviews (publications); gifted; creative ability; concept formation; cognitive development; personality

Research pertinent to concept formation and creativity in children was reviewed, focusing on cognitive styles and personality traits related to concept formation. Distinguishing charactersitics of the creative person studied were relationship of intelligence to creativity, preference for cognitive complexity, cognitive flexibility, perceptual openness, divergent thinking, and personality traits. Propositions in conceptual approach, based on experimental findings, were then examined: the creative individual formed concepts more easily and more quickly; the creative individual formed concepts that were more diverse, encompassed a broader range, and were idiosyncratic; and the concepts formed by creative individuals were more flexible, subtle, and complex. Implications of the hypotheses and findings were that the creative child needed psychological safety and that his basic problem might be his alienation from teachers and classmates. (CB)

ABSTRACT 1344

EC 04 1344 ED 059 562
Publ. Date 72 7p.
Skipper, Charles E.
A Longitudinal Study of Creative Abilities in Adolescents.
Miami University, Coral Gables, Florida
EDRS mf,hc
Paper Presented at the AERA Convention (Chicago, Illinois, April 7, 1972).

Descriptors: exceptional child research; creative ability; adolescents; longitudinal studies; creative development; creativity research; creativity; community resources

Reported was the 3-year longitudinal study on the influence of a living arts center of a public school system on the development of creative behavior in adolescents. Both experimental and control groups (adolescents in grades seven through 10) of 188 each were divided into high, middle, and low creative groups based on test scores from a creativity test. Attrition after 3 years reduced the experimental group to 35 adolescents. After a normal school day, the students participated in programs on the various arts. An expression of creative values by students, their families, nationally recognized artists, federal government, local community, and governmental agencies was said to characterize the program. Although the students concentrated in a specific chosen area, they were encouraged to explore other art areas. Several testing techniques were used to measure the creativity of the students. In general, participants were found to gain in ideational, fluency, flexibility, originality, elaboration and inventive level compared to pretest scores. The participants experienced significantly more community cultural programs than did the control group. An interesting result was said to be the finding that the male subjects became more sensitive to the aesthetics in life. (CB)

ABSTRACT 1484

EC 04 1484 ED N.A.
Publ. Date Apr 72 7p.
Torrance, . Paul
Creative Young Women in Today's World.
EDRS not available
Exceptional Children; V38 N8 P597-603 Apr 1972

Descriptors: creativity research; gifted; females; creative expression; followup studies; adults; sex differences; creative development; achievement

Data from a 12-year followup of a longitudinal study of a creative behavior were analyzed in such a way as to give clues concerning creative young women in today's world. The subjects were students at the University of Minnesota High School (grades 7 through 12) in 1959. Followup data were obtained from 117 women and 119 men. A canonical correlation of .51 was obtained for the creativity predictors and three criteria of adult creative behavior; one of .59 was obtained for the men and one of .46 for the women. There were no differences in any of the creativity predictor measures for the subjects except for elaboration (favoring the women) nor in either of the three criteria of adult creative behavior. Number of children negatively influenced performance on all three of the criteria for the women but only the quality of the creative achievement and creativeness of aspirations of the men. The more creative women tended more frequently than their less creative peers to be involved concurrently in careers and families while the less creative women more frequently limited their involvement to their families. The more creative women tended to find their highest creative achievements in writing, educational innovation, research and new theory, and music. (Author)

ABSTRACT 1634

EC 04 1634 ED N.A.
Publ. Date 71 11p.
Starkweather, Elizabeth K.
Creativity Research Instruments Designed for Use with Preschool Children.
EDRS not available
Journal of Creative Behavior; V5 N4 P245-55 4th Quarter 1971

Descriptors: exceptional child education; gifted; creative ability; preschool children; testing; test construction

Described are four creativity research instruments designed for use with preschool children. The four instruments are said to be constructed to elicit simple behavioral responses that can be scored objectively. The first instrument is the Starkweather Form Boards Test which consists of four form boards with pictures of scenes familiar to preschool children, and which is designed to test impersonal conformity. The Starkweather Social Conformity Test, the second instrument, is a color-preference test designed to measure conforming and nonconforming behavior; the test involves construction of a small booklet of colored pages. The third instrument is the Starkweather Target Game, which is designed to measure a child's willingness to attempt difficult tasks. The target game's construction resembles a jack-in-the-box with interchangeable pictures. The fourth instrument, the Starkweather Originality Test, contains 40 plastic foam pieces which the child is asked to identify, in an attempt to assess the child's originality of thought. (CB)

ABSTRACT 2165

EC 04 2165 ED N.A.
Publ. Date Sum 72 14p.
Torrance, E. Paul
Career Patterns and Peak Creative Achievements of Creative High School Students Twelve Years Later.
EDRS not available
Gifted Child Quarterly; V16 N2 P75-88 Sum 1972

Descriptors: exceptional child research; gifted; creative ability; adults; employment; followup studies; creativity research; creative development; creative expression; statistical data

Reported was a 12-year followup study of the 1959 University (Minnesota) High School population of 392 students conducted in 1971. Data analysis was explained to be based on completed questionnaires obtained from 251 of the subjects. The questionnaires were explained to request descriptions of the subject's three most creative or peak post-high school achievements. A canonical correlation of .51 was obtained for the full sample by combining the scores on the creativity test battery to predict the combined creativity criteria. Six tables of data were provided on the levels of creativity. It was concluded that young people identified as creative during the high school years tended to become productive, creative adults, that 12 years after high school graduation appeared to be an advantageous time for a followup study of adult creative achievements, that unusual occupations pressed as choices by creative students tended to become realities, that creative students tended to develop careers which involved detours for relevant but unusual combinations of training and/or experience, that creativity in conventional careers was more easily predicted by creativity tests than in nonconventional careers, and that students identified as highly creative tended to achieve their goals more than do students identified as less creative. (CB)

ABSTRACT 892

EC 05 0892 ED N.A.
Publ. Date Jan 73 6p.
Williams, John D. and Others
Creativity in Rural, Urban, and Indian Children.
EDRS not available
Journal of Psychology; V83 N1 P111-116 Jan 1973

Descriptors: exceptional child research; creative ability; disadvantaged youth; minority groups; economically disadvantaged; American Indians; elementary school students; verbal ability; socioeconomic influences; rural urban differences

The Torrance Tests of Creative Thinking were given to 237 grade school children who were divided into the following five groups: urban-middle income children, urban-lower income children, rural children, Indian-lower income children, and Indian-impoverished children. Significant differences were found on the three measures of verbal creativity with the groups scoring from high to low in the following order: rural, urban-middle income, urban-lower income, Indian-lower income, and Indian-impoverished. (DB)

ABSTRACT 1312

EC 05 1312 ED N.A.
Publ. Date 66 322p.
Drews, Elizabeth Monroe
The Creative Intellectual Style in Gifted Adolescents; Process and Product: A Reassessment of Students and Program. Final Report. The Effectiveness of Audio-Visuals in Changing Aspirations of Intellectually Superior Students, Phase II.
Michigan State University, East Lansing
Office of Education (DHEW), Washington, D. C.
EDRS not available
OEG-7-32-0410-222
Michigan State University, East Lansing, Michigan 48823.

Descriptors: exceptional child research; gifted; adolescents; creativity; intellectual development; followup studies; motivation; personality assessment; psychological characteristics; student attitudes; self actualization; educational programs; junior high schools; cognitive development; affective behavior; social adjustment; case studies (education)

Presented were followup data assessing 81 gifted senior high school students (and their controls) who had been enrolled in a year long junior high school program intended to increase motivation to learn, resistance to conformity, and openness to psychological growth, humanitarian-altruistic attitudes, and self-actualization. The report aimed at elaborating findings from the first project report and at testing the strength and durability of student attitude changes reported in the second study. Introductory material treated cognitive, affective, and social dimensions of creative intellectual style, idealized conceptions of society and man, and the potential of youth for creative intellectual growth. Data on the childhood and adult characteristics of creative and eminent persons were examined. Included were research data related to the present study: a descriptive study of the creative intellectual style of gifted adolescents, description of the experimental junior high school program, and new definitions of educational process. Ss were evaluated on formal and informal testing instruments (Omnibus Personality Inventory, Critical Thinking Test Form G, Student Profile Check, and Acceptance of Women Scale) and found to be significantly more inclined toward creative intellectualism than control groups. Extensive case histories of six of the Ss were presented to illustrate prototypes of the social leader, the studious individual, and the creative intellectual. (GW)

ABSTRACT 1537

EC 05 1537 ED N.A.
Publ. Date Win 72 8p.
Bruch, Catherine B., Morse, Jean A.
Initial Study of Creative (Productive) Women under the Bruch-Morse Model.
Gifted Child Quarterly; V16 N4 P282-9 Win 72

Descriptors: exceptional child research; gifted; creative ability; young adults; females; personality theories; psychological characteristics; prediction

The study investigated the relations among complexity and independence variables on a semantic differential test to

biographical elements and creativity predictors in 30 young women. Complexity, two independence variables (self-description and biographical), masculinity, intimacy, and creative potential were expected to correlate with creativity predictors and criteria of actual creative achievement developed by E. Paul Torrance. Data showed complexity to correlate with creativity predictor variables (inventive level and originality). Possible reasons for the correlation may be the high level of awareness of one's own emotional feelings and a greater experiencing of discrimination by highly complex young women. (DB)

ABSTRACT 1651

EC 05 1651 ED N.A.
Publ. Date 73 22p.
Parnes, Sidney J.; Noller, Ruth B.
Applied Creativity: The Creative Studies Project. Part IV--Personality Findings and Conclusions.
EDRS not available
Journal of Creative Behavior; V7 N1 P15-36 First Quarter 1973

Descriptors: exceptional child research; gifted; creative ability; college students; dropouts; personality assessment; personality change; undergraduate study; course objectives; creative thinking

Seven personality tests were administered to college students in a creative studies project (E) and to controls (C) to determine the psychological traits and comparability of E Ss, C Ss, and dropouts from each group; and to determine personality changes associated with creativity of students remaining in the project. Pretest data indicated the comparability of E and C Ss while subsequent comparison of the data on those who stayed in the project with data on program dropouts showed that the dropouts had scored lower on mental ability tests, displayed the volunteer syndrome, and were lower in self control and higher in manic tendencies. Additionally, data revealed that project dropouts as a group resembled dropouts in general (45% left the college), scored higher (females) on scales of artistic creativity than on applications of creative potential, sought novel experiences, and did not adjust well to structured situations. Findings also indicated the following: that continuing E Ss outstripped continuing C Ss in evaluative ability and non-academic achievement, that continuing C Ss were stronger in nonacademic achievement than E Ss who dropped out, that continuing E Ss were significantly stronger than C Ss on the Stony Brook Coping Problems test, and that on the Adjective Check List (which evaluates self-image) there was no significant difference between continuing E Ss and continuing C Ss. As a group, those who stayed in the project resembled the freshman class, were better able to analyze problems, and benefitted from cited program opportunities such as chances to formulate values and goals, leadership experiences, and individual projects. Initiated to increase divergent thought concepts within a framework of self discipline, the program's future objectives include such thrusts as wider dissemination of course offerings to incoming freshmen and programs for students with the dropout syndrome. (MC)

ABSTRACT 1820

EC 05 1820 ED N.A.
Publ. Date May 73 2p.
Halpin, Gerald and Others
Biographical Correlates of the Creative Personality: Gifted Adolescents.
Exceptional Children; V39 N8 P652-3 May 73

Descriptors: exceptional child research; gifted; creative ability; adolescents; student attitudes; environmental influences; correlation

A biographical questionnaire was administered to 312 gifted high school juniors and seniors to study the relationship between experiences and the creative personality. The five factors which accounted for most of the variance in the creative personality test scores among the girls were cultural-literary interests, scientific artistic interests, academic attitude, popularity with the opposite sex, and maladjustment. The five factors which accounted for most of the variance in the test scores of boys were academic attitude, athletic interest, independence/dominance, parental control, and socioeconomic status. (DB)

ABSTRACT 1920

EC 05 1920 ED 002 921
Publ. Date 64 449p.
Torrance, E. Paul and Others
Role of Evaluation in Creative Thinking.
Minnesota University, Minneapolis, Bureau of Educational Research
Office of Education (DHEW) Washington, D. C. Cooperative Research Program
EDRS mf,hc

Descriptors: exceptional child research; gifted; creative ability; evaluation; teacher evaluation; self evaluation; creative thinking; creativity research; testing; positive reinforcemnt; environmental influences; cultural differences; school role; Torrance (E. Paul)

Reported were approximately 30 studies dealing with the role of evaluation in creative thinking and ways to reward and encourage creative behavior. Three aspects of evaluation studied were cultural values, evaluative behavior of peers and older persons, and self evaluation. The 25 chapters presented studies and discussion of the following topics: the need for rewarding creative thinking, a strategy for solving the role of evaluation in creative thinking, problems in the measurement of creative behavior, instruments used in studying the role of evaluation, what happens when teachers try to apply principles for rewarding creative thinking, creative motivations of teachers and creative growth of pupils, the principal and the environment which values creative thinking, creative activities and the environment which rewards creativity, differential rewards for boys and girls, how differential rewards influence originality, the effects of three types of evaluative proctice in creative behavior, competition as a type of external evaluation, unevaluated practice and creative behavior, critical and creative peer evaluated practice, talking with cildren about their creative productions, peer pressure in homogeneous and heterogeneous groups, positive and negative evaluation, how different cultures evaluate creative characteristics, how children perceive the culture's evaluation of divergency, helping children value their ideas, evaluative attitudes and the development of new ideas, evaluative attitudes and different kinds of educational achievement, rewarding self-initiated learning, and what schools should do about rewarding creative behavior. (DB)

ABSTRACT 1923

EC 05 1923 ED 018 273
Publ. Date Dec 67 443p.
Torrance, E. Paul
Understanding the Fourth Grade Slump in Creative Thinking. Final Report.
Georgia University, Athens
Office of Education (DHEW), Washington, D. C. Cooperative Research Program
EDRS mf,hc
OEC-SAE-8995 BR-5-0508
CRP-994

Descriptors: exceptional child research; creative ability; disadvantaged youth; culturally disadvantaged; child development; elementary school students; grade 4; cross cultural studies; testing; conformity; longitudinal studies; intellectual development; cognitive processes; creative development; cultural factors; Negroes; peer relationship; complexity level; Torrance, (E. Paul)

Results were reported from cross-cultural studies in seven cultures, conformity behavior studies, and longitudinal studies to investigate discontinuous intellectual development as opposed to continuous development, with emphasis on children's creative functioning and development at 9 to 10 years of age (grades 4 to 5). Whether fourth grade slump is culture-made or inherent was investigated in schools in an advantaged, dominant subculture (U.S., suburban, white); a disadvantaged minority subculture (U.S., segregated, Negro); a primitive, suppressive culture (Samoan government, and mission schools); a European culture with creative achievement/low peer orientation (Germany, advantaged/disadvantaged); a European culture with limited creative achievement (Norway, suburban/rural); an English speaking culture with strong authority control/low peer orientation (western Australia, urban/rural); and an emerging culture with many subcultures and different languages (New Delhi, India, seven schools, each with a different culture). Samples of 500 to 1000 Ss, grades 1 to 6, in each culture, were given three figural and six verbal creativity tests. Teachers provided information on classroom practice, educational philosophy, and attitudes regarding appropriate child behavior (Ideal Pupil Checklist). Some of the results showed that German, Norwegian, Australian, and Indian Ss performed better on verbal, and Samoan and Negro Ss performed better on figural batteries (U.S. Negroes were among the best in

figural fluency and originality); that discontinuities varied culture to culture, occurred most frequently between third and fourth grade, and occurred when children in a culture experienced new stresses or demands; that cultural factors strongly influenced creative development and the level and type of creative functioning; and that complexity and elaboration were required for adjustment in developed cultures and were maladaptive for less developed cultures. Six studies in U.S. schools with approximately 150 to 500 Ss in each school, grades 2 through 6, on conformity behavior (Ss were given a problem and later were asked whom they consulted) showed peer consulting increase and adult consulting decrease at about the fourth grade level, with concurrent reduction in originality, ideas, and questions (sex and age appeared as possible factors). The longitudinal studies involved all Ss in two U.S. elementary schools from 1959 to 1964, and a sample of 100 Ss, grades 1 through 6, for the current study, who were tested for creativity. Data indicated that 50% of the Ss showed serious fourth grade slumps, that many Ss recovered in fifth and sixth grades, that some Ss slumped in fifth grade, and that some Ss who had formerly performed at a high level slumped and did not recover. Data from the three studies include implications for the concept of continuous development, and for the education of Negro and other minority children. (MC)

ABSTRACT 388

EC 06 0388 ED N.A.
Publ. Date 73 6p.
Stievater, Susan M.
Bibliography of Recent Books on Creativity and Problem-Solving: Supplement IV.
EDRS not available
Journal of Creative Behavior; V7 N3 P208-13 3rd Qtr 1973

Descriptors: exceptional child education; gifted; bibliographies; creativity; problem solving

Presented is a list of approximately 61 recent books relating to creativity and problem solving. The list is said to be the fourth in a continuing series offered for current interest. The books are arranged alphabetically by author and are designated as to primary interest area. (MC)

ABSTRACT 389

EC 06 0389 ED N.A.
Publ. Date 73 9p.
Stievater, Susan M.
Bibliography of Recent Theses on Creativity and Problem-Solving: Supplement II.
EDRS not available
Journal of Creative Behavior; V7 N3 P214-22 3rd Qtr 1973

Descriptors: exceptional child education; gifted; bibliographies; creativity; problem solving

A list of approximately 67 recent books relating to creativity and problem solving is presented. The list is said to be the second in a continuing series offered for current interest. The books are arranged alphabetically by author and are designated as to primary interest area. (MC)

ABSTRACT 737

EC 06 0737 ED N.A.
Publ. Date 66 510p.
Drews, Elizabeth Monroe
The Creative Intellectual Style in Gifted Adolescents Process and Product: A Reassessment of Students and Program.
EDRS not available
Michigan State University, East Lansing, Michigan 48823

Descriptors: exceptional child research; gifted; creative ability; high achievers; adolescents; creativity; ethics; psychological development; self concept; psychological evaluation; testing; personality assessment; test interpretation; curriculum evaluation

The third of a three part study investigated effects of a creative audiovisual curriculum on aspiration change of 81 gifted experimental and 71 control students in grade 10 and also determined through interviews the creative intellectual style (creative intellectual, studious prototype, or social leader) of 45 students. Findings from the first study (1959 to 1961), involving all gifted students with IQ's above 120 in grades 10, 11, and 12, showed that intellectual, creative, and ethical dimensions of psychological growth would be stunted or warped if young persons' development toward identity did not find a responsive and evocative environment. The findings prompted the Phase I study (1962 to 1963) undertaken with 103 experimental and 95 control students in grade 9. The original focus on career training was abandoned due to difficulty of 14-and 15-year-old students in making a career choice. The research design was changed to an introduction to intellectual disciplines and the creative style of living. A curriculum was developed which featured 10 style-of-life films and a text-anthology on the natural, technological, aesthetic, and human worlds. In Phase II (1964) the 81 experimental (directly exposed to the curriculum) and 71 control (indirectly exposed) students (of the original 103 and 95 students, respectively) were retested on the same formal and informal measures used in pretests and posttests in Phase I. A comparison of mean scores on the Omnibus Personality Inventory (OPI) showed that Phase II students (who had been exposed to the curriculum) were significantly higher on originality and complexity scales than students in the original study, that Phase II girls were higher in originality, complexity, thinking introversion and estheticism; and that experimental boys were significantly higher only on complexity, and significantly lower on estheticism. Gains for Phase II students on the OPI and other formal measures of creative intellectual style did not hold for the problem solving test. Creative intellectuality was reflected on seven informal measures. Descriptive data was collected for six case studies to show the three ideal types from the 45 students interviewed. (For related information see EC 020 022, EC 021 026, and EC 023 186.) (MC)

ABSTRACT 865

EC 06 0865 ED N.A.
Publ. Date F 73 10p.
Aldous, Joan
Family Background Factors and Originality in Children.
Gifted Child Quarterly; V17 N3 P183-92 F 1973

Descriptors: exceptional child research; gifted; elementary school students; creativity; performance factors; sex differences; socioeconomic status; family influence; group structure

Examined were factors of sex, social class, family size, ordinal position, and school class composition (blue or white collar) on the originality of 309 male and 311 female third grade children in a suburban and an urban district. Results showed that girls did not score lower on test-measured creativity (contrary to the hypothesis), that middle class children scored higher than working class children as hypothesized, that family size as hypothesized was negatively related to originality with the highest scores in one and two child families, and that school composition results did not support the hypothesis that students from a minority would develop broader knowledge and innovative responses. Oldest boys and only girls were the most original. (MC)

ABSTRACT 1084

EC 06 1084 ED N.A.
Publ. Date Apr 74 3p.
Bachtold, Louise M.
Effects of Learning Environment on Verbal Creativity of Gifted Students.
EDRS not available
Psychology in the Schools; V11 N2 P226-8 Apr 1974

Descriptor: exceptional child education; aurally handicapped deaf; special schools; residential schools; foreign countries; Soviet Union

Compared were the performances of 58 gifted fifth and sixth grade students in three different instructional settings on the Torrance Tests of Creative Thinking, Verbal Form. Students, who had scored at above the 98th percentile on an individual intelligence test, were either in a special class program, an enrichment program, or a part time learning center (LCP) program. The tests were administered at the beginning and end of the school year and evaluated number of ideas (fluency), variety of ideas (flexibility), and unusual ideas (originality). On pretesting no significant differences were found between boys and girls, between grade levels, or among the three programs (with the exception that LCP students were slightly more fluent). Posttest results indicated that the LCP students, whose program involved interaction with materials and resource persons in learning centers outside the regular classroom, showed the greatest increase in verbal creativity. (DB)

ABSTRACT 1928

EC 06 1928 ED N.A.
Publ. Date First Qtr. 74 5p.
Nash, William R.; Torrance, E. Paul

Creative Reading and the Questioning Abilities of Young Children.
Journal of Creative Behavior; V8 N1 P15-9 First Quarter 1974

Descriptors: exceptional child research; creative ability; primary grades; creative thinking; divergent thinking; reading; reading comprehension; Questioning

Compared were the questioning abilities of three groups of 50 first graders: a group using a creative reading program (Reading 360), a group using a traditional program, and a special comparison group who received highly structured and intensive cognitive training. A Question Asking Task (developed by Paul Torrance) was administered at the beginning and the end of the academic year. The data indicated that the creative reading approach which emphasized the incompleteness of knowledge improved questioning performance, especially in a willingness to question discrepancies. The cognitive development group asked the largest number of verification and naming questions. (DB)

ABSTRACT 2737

EC 06 2737 ED N.A.
Publ. Date 74 7p.
Renzulli, Joseph S. and Others
Fluency, Flexibility, and Originality as a Function of Group Size.
Journal of Creative Behavior; V8 N2 P107-13 Second Quarter 74

Descriptors: exceptional child research; creativity research; creative development; groups; problem solving; college students; group dynamics

To investigate the effect of group size on total group and per person fluency, flexibility, and originality of response to problem solving tasks 163 college students were randomly assigned to comparison groups of one, three, six, and 12 members and given identical problem solving tasks. These tasks were to list uses for wire coat hanger, list consequences of world's people being 12 inches in height, and list all things that come in pairs. Both group and average per person scores were determined for fluency, flexibility, and originality. Statistical analysis showed that as group size increased, the fluency, flexibility, and originality of the group also increased although adjacent groups were sometimes statistically equal. As group size increased, the per person contribution decreased, but groups of six or 12 members had about the same effect on per person contributions. Application of results of the study depends upon purposes of group problem solving--to get problems solved or to train group members to be more creative. (MYS)

ABSTRACT 734

EC 07 0734 ED N.A.
Publ. Date 74 3p.
Rookey, Thomas J.
Validation of a Creativity Test: The 100 Students Study.
Journal of Creative Behavior; V8 N3 P211-3 74

Descriptors: gifted; intermediate grades; creativity; testing; test validity; Pennsylvania Assessment of Creative Tendency;

To evaluate the validity of the Pennsylvania Assessment of Creative Tendency (PACT), 84 fourth grade winners in a creative writing contest were administered the test. Data supported the prediction that elementary school students who had gained national recognition as creative writers would have a higher distribution of scores than normal distribution on PACT. (GW)

ABSTRACT 2082

EC 07 2082 ED N. A.
Publ. Date 75 5p.
Khatena, Joe
Vividness of Imagery and Creative Self Perceptions.
Gifted Child Quarterly; V19 N1 P33-7 Spr 1975

Descriptors: research projects; gifted; adults; creativity; imagery; self concept; self evaluation;

To investigate the relationship between the vividness of imagery production and creative self perceptions, three tests were administered concurrently to 107 college adults. On the basis of their test scores, Ss were divided into vivid, moderate and weak imagers. Results indicated that vividness of imagery was significantly related to creative self perceptions especially in regard to seeing, hearing and touching. (LH)

ABSTRACT 2085

EC 07 2085 ED N. A.
Publ. Date 75 6p.
Frederiksen, Norman; And Others
Development of Provisional Criteria for the Study of Scientific Creativity.
Gifted Child Quarterly; V19 N1 P60-5 1975

Descriptors: research projects; gifted; adults; creative thinking; sciences; test construction; test reliability; test validity;

Researchers are working to develop reliable and valid criterion measures for studying scientific creativity. The Formulating Hypothesis (FH) test, designed to measure the ability to account for and interpret research data, was administered to 400 undergraduate college students. Preliminary results indicated that meaningful indexes of ideational quality and quantity can be derived from the FH test, and additional versions of the test are being developed. Other instruments being developed to sample aspects of scientific thinking include tests of the ability to measure and analyze psychological constructs, formulate research ideas, and evaluate hypotheses and research proposals. (LH)

ABSTRACT 2952

EC 07 2952 ED N. A.
Publ. Date Sum 75 12p.
Khatena, Joe
Creative Imagination, Imagery, and Analogy.
Gifted Child Quarterly ; V19 N2 P149-60

Descriptors: general education; creativity; imagination; imagery; research projects; research needs; testing;

The function of the creative imagination and its imagery and analogy correlates are discussed. The need for further research on imagery and creativity is emphasized, and a test for measuring verbal originality is described. Briefly explained are three studies which explored analogy production and the effects of a training program on the use of analogy and imagery by college students. (LH)

ABSTRACT 2976

EC 07 2976 ED N. A.
Publ. Date 1qtr75 5p.
Chaudhari, U. S.
Questioning and Creative Thinking: A Research Perspective.
Journal of Creative Behavior ; V9 N1 P30-4

Descriptors: general education; research reviews (publications); questioning techniques; creative thinking; thought processes; convergent thinking; divergent thinking;

Reviewed is research dealing with the type of questions asked in classrooms and presented in textbooks. Cited are studies demonstrating the low cognitive level of the majority of questions. Emphasized is the need for training teachers to ask questions requiring interpretation, translation, and convergent and divergent thinking. (CL)

ABSTRACT 2978

EC 07 2978 ED N. A.
Publ. Date 1qtr75 10p.
Edmonston, Paul
A Conceptual Model of Creative Visual Intelligence.
Journal of Creative Behavior ; V9 N1 P51-60

Descriptors: general education; art; visual learning; visual perception; creativity; models; conceptual schemes; behavior patterns;

Described is a conceptual model of visual creativity based on aspects of the lives of creative persons in the visual arts field. The model includes the following components: visual hunger, appetite for visual experiences, a well developed visual sensitivity, the ability to recall imagery immediately from a vast storehouse of visual experience, cultivated habits of observation and a drive for visual order. Cited are examples of specific artists who demonstrate the characteristics. (CL)

ABSTRACT 3389

EC 07 3389 ED N. A.
Publ. Date 2qtr75 15p.
Goldberg, Minerva J.
Films on Creativity: Supplement 1.
Journal of Creative Behavior; V9 N2 P97-111

Descriptors: exceptional child education; gifted; creativity; bibliographies; films;

The annotated bibliography lists 66 films relating to creativity. Provided are information on the type of film (color or black and white), length, and source, as well as an unevaluative annotation. Films are presented alphabetically by title and include subjects such as art, religion, and psychology. (SB)

ABSTRACT 3640

EC 07 3640 ED N. A.
Publ. Date Aug 75 7p.
Suter, Barbara; Domino, George
Masculinity-Femininity in Creative College Women.
Journal of Personality Assessment; V39 N4 P414-420

Descriptors: research projects; general education; undergraduate study; young adults; females; creativity; sexuality; personality assessment; behavior patterns; role perception;

A study of two samples (n 45) of college women scoring high or low on creativity measures was conducted to investigate the relationship between masculinity and creativity. Ss were administered a battery of masculinity-femininity scales that measured manifest and latent masculinity; conventionality, passivity, and feminine sensitivity; and self-perception. High creative Ss scored higher on activity and described themselves as more masculine, indicating that they possessed a broader, less stereotyped sex-role identity. (Author/SB)

ABSTRACT 3719

EC 07 3719 ED N. A.
Publ. Date Fal 75 6p.
Feldhusen, John F.; And Others
The Effects of Visual and Verbal Stimuli on Divergent Thinking.
Gifted Child Quarterly; V19 N3 P205-209, 263

Descriptors: general education; divergent thinking; research projects; aural stimuli; visual stimuli; higher education; environmental influences; creativity; testing;

A study involving 125 undergraduate students was conducted to determine the effects of visual and verbal stimuli on divergent thinking. Ss were administered four of Guilford's consequence tasks (such as 'what would be the results if everyone suddenly lost the ability to read and write?') under conditions in which verbal and visual stimuli were introduced at different times. Results indicated that verbal stimuli increased originality while the pictorial stimuli did not; and that the time at which the stimuli was introduced had no consistent effects on responses. Evidence suggested the need for controlling and reporting in detail the environmental testing conditions in creativity research. (SB)

ABSTRACT 1588

EC 501 018 ED N.A.
Publ. Date 69 7p.
Torrance, E. Paul
Prediction of Adult Creative Achievement Among High School Seniors.
EDRS not available
Gifted Child Quarterly; V13 N4 P223-9 Win 1969

Descriptors: exceptional child research; gifted; creativity; creative activities; predictive validity; predictive ability (testing); test reliability; ability identification; high school students; Torrance Tests of Creative Thinking

To determine the reliability of the Torrance Tests of Creative Thinking in predicting creativity, a long range followup was conducted from 1959 to 1966. Data was obtained on 46 subjects whose creative achievements were judged for quality by five judges on a 10 point scale. At a level of significance of .05, 11 of the coefficients of correlation for the creativity predictors are significant. Twenty-five of the group were pursuing their doctorates, and those who originally scored highest on creativity had produced the greatest creative work. The conclusion is that creativity can and should be tested and encouraged among those who score high on the tests. Tables of results are included. (JM)

ABSTRACT 2838

EC 03 2838 ED N.A.
Publ. Date 71 10p.
Torrance, E. Paul
Some Validity Studies of Two Brief Screening Devices for Studying the Creative Personality.
EDRS not available
Journal of Creative Behavior; V5 N2 P94-103 Second Quarter 1971

Descriptors: exceptional child research; gifted; screening tests; creativity research; creative ability; test validity; test construction

The author describes two brief screening devices for studying the creative personality and some of the validity studies thus far accumulated. The Creative Motivation Scale is a screening device built around seven basic scales: creative motivation, critical motivation, power motivation, quest for certainty, quest for meaning, quest for social relations, and rejection of social relations. Another screening device is the What Kind of Person Are You? test. The present version of the test consists of 50 items arranged in a forced-choice format and takes most subjects 5 to 10 minutes to complete. Evidences of test validity are found in studies using the Sounds and Images Test of Originality (Cunnington and Torrance, 1965), imaginative stories, originality scores on Onomatopoeia and Images Test, Provocative Questions Test (Torrance, 1966), and Runner studies of Attitude Patterns (Runner and Runner, 1965). Immediate feedback is easy to supply, making both devices ideal for audience-involving discussions of the creative person and of creative behavior. (CB)

ABSTRACT 2839

EC 03 2839 ED N.A.
Publ. Date 71 9p.
Treffinger, Donald J. and Others
Problems in the Assessment of Creative Thinking.
EDRS not available
Journal of Creative Behavior; V5 N2 P104-12 Second Quarter 1971

Descriptors: creativity research; theories; research methodology; problem solving; test validity; performance criteria; creative thinking

The authors provide an overview of the major problems and issues relating to scientific study of creativity. Due to lack of a unified, widely-accepted theory of creativity, educators face problems of establishing a useful operational definition, understanding implications of differences among tests and test administration procedures, and understanding relationships of creativity to other human abilities. It is also pointed out that, due to difficulties in identifying acceptable external criteria for validation of creativity tests, diverse criteria are used such as teacher and peer judgments, creativity profiles, and created products. (CB)

ABSTRACT 2840

EC 03 2840 ED N.A.
Publ. Date 71 10p.
Kaltsounis, Bill
Instruments Useful in Studying Creative Behavior and Creative Talent. Part 1, Commercially Available Instruments.
EDRS not available
Journal of Creative Behavior; V5 N2 P117-26 Second Quarter 1971

Descriptors: creative ability; testing; verbal tests; nonverbal tests; personality assessment

The author gives a partial listing of commercially available instruments or tests in areas of verbal ability, nonverbal ability, personality, and biographical data which are designed for use in studying creative behavior and creative talent. Brief descriptions and source addresses are included. (CB)

ABSTRACT 1535

EC 04 1535 ED N.A.
Publ. Date 72 19p.
Crockenberg, Susan B.
Creativity Tests: A Boon or Boondoggle for Education?
EDRS not available
Review of Educational Research; V42 N1 P27-45 Win 1972

Descriptors: exceptional child research; research reviews (publications); creative ability; creativity research; testing; test evaluation; test validity; Torrance Tests of Creative Thinking; Wallach and Kogan Creativity Battery

Reviewed was selected research on test evaluation and validity for the Torrance Tests of Creative Thinking and the Wallach and Kogan Creativity Battery. The Torrance Tests of Creative Thinking are described to consist of seven verbal and three figural tests that are all scored for fluency, flexibility, originality, and elaboration. Testing procedure involves test administration in a test-like atmosphere in which each test is timed. Trait consistency and the IQ threshold for creativity were examined with the finding that a reasonably high IQ score is usually necessary for good creativity test performance. Test reliability and validity were then reviewed. The Wallach and Kogan Creativity Test is described to focus on the number of associational responses that a person generates and the originality of the responses. The test atmosphere is free from time pressure and includes both verbal and visual content that is scored for fluency and uniqueness. Research cited in connection with test validity indicated that the test was not conclusive and that one could score high on the test without a comparable high IQ score. It was concluded that the Wallach and Kogan test measured fluency more than creativity. Due to the uncertainty of the validity for both creativity tests, educators are advised to use the tests with discretion. (CB)

ABSTRACT 943

EC 05 0943 ED N.A.
Publ. Date 4th Qtr 72 17p.
Torrance, E. Paul
Predictive Validity of the Torrance Tests of Creative Thinking.
EDRS not available
Journal of Creative Behavior; V6 N4 P236-52 4th Quarter 1972

Descriptors: exceptional child research; gifted; research reviews (publications); creativity; test validity; prediction; creative thinking; creativity research; Torrance Test of Creative Thinking

The author reviewed major long-range predictive validity studies of the Torrance Tests of Creative Thinking, and reported the main findings of a 12-year followup of a predictive validity study with high school students initiated in 1959. The behaviors predicted in short-range studies occurred during a period ranging from a few days to 1 year following administration of tests of creative thinking, and ranged from ideas and questions produced in standardized situations (creative writing, science questions, curriculum tasks) to teaching behavior extending over a period of several months. Results of the 12-year predictive validity study indicated that creativity tests administered during high school years can predict adult creative achievements, although it was noted that Ss of the study were fairly advantaged and had ample opportunities and freedom to develop their creative abilities. (GW)

ABSTRACT 944

EC 05 0944 ED N.A.
Publ. Date 4th Qtr 72 15p.
Treffinger, Donald J.; Poggio, John P.
Needed Research on the Measurement of Creativity.
EDRS not available
Journal of Creative Behavior; V6 N4 P253-67 4th Quarter 1972

Descriptors: exceptional child education; gifted; research needs; measurement; creativity; test validity; test reliability; research methodology; theories

Validity, reliability, and usability are identified as problematic areas in the measurement of creativity which require additional research. Theoretical problems, methodological problems, and research needs are examined for the following areas of validation: content validity (the determination of a sample universe); criterion-related validity (selection of appropriate criteria); and construct validity (the need for extensive theory on which to base predictions and interpretations). A variety of approaches to the establishment of reliability are discussed: one which emphasizes the stability of test scores over a period of time, one which concerns itself with the equivalence or comparability of various forms of a test, and one which stresses internal consistency. Test administration, test scoring, and norms are said to be the problem areas relating to the usability of measurements of creativity. (GW)

ABSTRACT 945

EC 05 0945 ED N.A.
Publ. Date 4th Qtr 72 7p.
Kaltsounis, Bill
Additional Instruments Useful in Studying Creative Behavior and Creative Talent. Part III, Non-Commercially Available Instruments.
EDRS not available
Journal of Creative Behavior; V6 N4 P268-74 4th Quarter 1972

Descriptors: exceptional child education; gifted; creativity; measurement techniques; testing

Listed are approximately 38 noncommercially available instruments said to be useful in studying creative behavior and creative talent. Each entry is presented with an annotation describing what the instrument evaluates and a reference indicating where the instrument may be found. Noted are two previous listings of instruments for studying creative behavior and talent. (GW)

ABSTRACT 1198

EC 05 1198 ED N.A.
Publ. Date Sep 72 7p.
Kazelskis, Richard
The Convergent, Divergent and Factorial Validity of the Torrance Figural Test of Creativity.
EDRS not available
Southern Journal of Educational Research; V6 N3 P123-9 Sep 1972

Descriptors: exceptional child research; gifted; creativity; testing; test validity; Torrance Tests of Creative Thinking

The fluency, flexibility, originality and elaboration scores obtained from the Picture Completion and Parallel Lines activities of the Figural Tests of the Torrance Tests of Creative Thinking were examined for convergent and divergent validity. Ss were 111 predominantly black high school sophomores and juniors from a rural area who generally scored low on verbal and quantitative measures of intelligence. In general it was found that factors did not satisfactorily meet the four Campbell and Fiske (1959) validity criteria. A strong method (activity or test) effect was reported both from consideration of the multitrait-monomethod matrices and factor analytic results. Elaboration appeared to be a dimension quite separate from the other three. Scoring a single set of responses to the Torrance Figural Tests several ways to obtain scores for the different creativity factor was not recommended. (Author/GW)

ABSTRACT 1911

EC 05 1911 ED 001 247
Publ. Date 64 56p.
Starkweather, Elizabeth Kezia
Conformity and Nonconformity as Indicators of Creativity in Preschool Children.
Office of Education (DHEW), Washington, D. C. Cooperative Research Program
EDRS mf,hc

Descriptors: exceptional child research; gifted; creative ability; preschool children; conformity; identification; imitation; sex differences

Investigated was nonconformity as an indicator of creativity in preschool children in two experiments, one experiment designed to measure social conformity in 200 children and the other to measure the conformity in an impersonal situation of 144 children. In the social conformity experiment, a color preference task, each child was given an opportunity to either conform to parents or peers or to nonconform. In the impersonal situation, a form board task, each child could either conform to a visible pattern or nonconform. Both experiments discriminated between children who were free to use conforming or nonconforming behavior and children who were compulsive conformists or nonconformists. In the social experiment opportunity to conform to parents had a greater influence than opportunity to conform to peers, and girls were primarily conformists while there were both conformists and nonconformists among boys. In the impersonal situation conforming behavior was demonstrated more frequently than nonconforming behavior by both boys and girls with no sex differences apparent. A freedom-to-express instrument has also been developed which is less precise but may be valuable in exploratory studies. (DB)

ABSTRACT 2569

EC 05 2569 ED N.A.
Publ. Date Sum 73 5p.
Torrance, E. Paul and Others
Improving Predictions of the Adult Creative Achievement of Gifted Girls by Using Autobiographical Information.
Gifted Child Quarterly; V17 N2 P91-5 Sum 1973

Descriptors: exceptional child education; gifted; creative ability; females; secondary school students; followup studies; prediction; achievement; Torrance (E. paul)

The study combined autobiographical information with creativity scores to improve the prediction of adult creative achievement in 45 gifted high school girls. The creativity test had been given 12 years prior to the present study in which Ss were asked to complete the Alpha Biographical Inventory and other measures. The best single predictor was the inventiveness score of the Torrance Tests of Creative Thinking. A combination of the two measures correlated better with the criteria of adult achievement (quantity, quality, and aspirations) than did either of the measures alone. (See EC 042 165, EC 041 484 for related information). (DB)

ABSTRACT 387

EC 06 0387 ED N.A.
Publ. Date 73 7p.
Whiting, Bruce G.
How to Predict Creativity from Biographical Data.
EDRS not available
Journal of Creative Behavior; V7 N3 P201-7 3rd Qtr 1973

Descriptors: exceptional child research; gifted; creative ability; adults; creativity research; employment; screening tests; prediction; performance factors; expectation

Described is use of biographical data screening to identify measures which predict creative performance of new employees in research and development (R & D) fields. The approach is said to involve management identification of indices which agree with measures of creativity (such as papers, supervisor rankings, and peer rating) and a simple screening step containing questions on personal and work history. Studies are examined which illustrate the link between biographical data screening and creative job performance in R & D fields such as the National Aeronautics and Space Administration. Data comparison from two unrelated studies are tabularly presented to show that the percentage of new employees in the high performance category is increased by use of the screening technique. (MC)

ABSTRACT 2223

EC 06 2223 ED N.A.
Publ. Date Sum 74 9p.
Lynch, Mervin D.; Edwards, Thomas M.
The Miniscat: Its Development and Some Evidence of Its Validity.
Educational and Psychological Measurement; V34 N2 P397-405 Sum 1974

Descriptors: exceptional child research; creative ability; creativity research; primary grades; adults; identification; examiners; test validity; association tests; paired associate learning; divergent thinking; Miniscat

Evaluated with 184 first and third grade children and 46 adult judges were the validity of a test to identify creative ability, the Miniscat, and whether only creative adults can recognize creativity in children. Test items represented six different associate rule structures and were paired to form doublets (such as peanut and fly) to be responded to by a third associated word (such as butter). Test validity was supported by a positive correlation between Ss' scores on a story completion test and scores obtained on

the Miniscat. Scores for grade 1 were higher than grade 3 scores on form B but not on form A, and girls scored higher than boys on form A but not on form B. Results of creativity tests given to judges showed that adult creativity scores were unrelated to identification of creativity in children. (BA)

ABSTRACT 2225

EC 06 2225 ED N.A.
Publ. Date Sum 74 2p.
Plass, Howard and Others
The Factorial Validity of the Torrance Tests of Creative Thinking for a Sample of 111 Sixth-Grade Children.
Educational and Psychological Measurement; V34 N2 P413-6 Sum 1974

Descriptors: exceptional child research; creative ability; elementary school students; test validity; factor analysis; creativity research; creative thinking

Determined was the factorial validity of the 30 measures of the Torrance Tests of Creative Thinking with 111 sixth grade children. Item intercorrelations were subjected to a varimax factor analysis. Data indicated that each of the seven rotated factors described a task rather than the hypothesized psychological process for which it was scored. (BA)

ABSTRACT 2736

EC 06 2736 ED N.A.
Publ. Date 74 6p.
Ward, William C.
Creativity(?) in Young Children.
Journal of Creative Behavior; V8 N2 P101-6 Second Quarter 74

Descriptors: exceptional child education; gifted; creativity; childhood; testing problems; creative development; creativity tests; predictive measurement; creativity research

One faces difficult testing problems when trying to measure creativity in childhood and enhance creative development, and one should refrain from labeling research instrument 'creativity tests' and be aware of the uncertainty of relations among various components of creativity. Difficult problems arise in the assessment of creativity in children. More problems arise when trying to predict creativity from childhood to adulthood since experiences intervene and many additional abilities are required. Single creative traits such as playfulness can be measured. Teachers should encourage playfulness, but they should also encourage persistence and task involvement which are necessary to creative accomplishment. Creativity should not be used in the name of any research instrument for young children; rather tests should be labeled specifically for what they measure. Creativity should be broken into components for study so that relations among parts are discovered rather than assumed. (MYS)

ABSTRACT 2738

EC 06 2738 ED N.A.
Publ. Date 74 2p.
Taylor, Irving A. and Others
The Measurement of Creative Transactualization: A Scale to Measure Behavioral Dispositions to Creativity.
Journal of Creative Behavior; V8 N2 P114-5 Second Quarter 74

Descriptors: creativity tests; adults; creativity; Creative Behavior Disposition Scale

The Creative Behavior Disposition Scale is a paper and pencil creativity test of 75 items for adults which measures creativity and yields 10 subscores, an overall summary, and five profiles. Based on the concept of creative transactualization (expanding on self actualization to include actualization of the environment) the Scale measures five creativity dispositions: expressive, technical, inventive, innovative, and emergent which are related by the Scale to five areas of creativity. Significant and meaningful correlations have been found between the Scale and other measures of creativity. The Scale has a generally high degree of internal consistency and adequate reliability. It provides a broader base to measure creativity than other tests. (MYS)

ABSTRACT 2111

EC 07 2111 ED N. A.
Publ. Date 75 9p.
Ward, William C.
Convergent and Divergent Measurement of Creativity in Children.
Educational and Psychological Measurement; V35 N1 P87-95 Spr75

Descriptors: general education; intermediate grades; creativity; measurement techniques; divergent thinking; convergent thinking; individual differences;

Sixty-five fourth through sixth grade children were given two types of creativity measures: divergent measures in which Ss named all the ideas they could that met a simple requirement, and convergent measures (adaptations of Mednick's Remote Associates Test) in which Ss attempted to find one word that was associatively related to each of three others. Divergent and convergent measures shared little variance, and the latter were strongly correlated with IQ and achievement. Moreover, convergent items requiring production of the correct association were strongly related to items requiring only recognition. Data indicated that, in children, Remote Associates performance depends on individual differences other than the size of the associative repertoire. (Author/GW)

ABSTRACT 2731

EC 07 2731 ED N. A.
Publ. Date Apr 75 4p
Khatena, Joe
Developmental Patterns and Creative Orientations on 'Something About Myself.'
Talents and Gifts; V17 N3 P23-6 Apr 75

Descriptors: exceptional child research; gifted; senior high schools; undergraduate study; creative development; maturation; creative thinking; self concept; check lists;

An autobiographical creativity checklist entitled 'Something About Myself' was administered to 912 gifted high school and college students to identify their developmental patterns and self-perceived creative orientations. Ss' responses were analyzed both for the total scale and for relative priorities assigned to six creative orientations. Results indicated that mean scores rose from grade 9 through the senior year in college, that creative self- perceptions on the total scale were generally lower for adolescents than for college students, and that Ss assigned the following priority order to their creative orientations: environmental sensitivity, intellectuality, individuality, self-strength, artistry and initiative. (LH)

ABSTRACT 2948

EC 07 2948 ED N. A.
Publ. Date Sum 75 15p.
Guilford, J. P.
Varieties of Creative Giftedness, Their Measurement and Development.
Gifted Child Quarterly ; V19 N2 P107-21

Descriptors: gifted; creative thinking; problem solving; models; learning theories; exceptional child education; conceptual schemes; creative development; Structure of Intellect;

The development and measurement of gifted children's creative thinking and problem solving skills are discussed. Analyzed within the context of the structure of intellect (SOI) model are theories regarding kinds of intellectual operations (such as divergent production and evaluation), informational content (such as semantic and behavioral items), and informational products (such as units and systems). Concepts of fluency, flexibility, originality and elaboration are related to SOI abilities and are illustrated by examples from the author's battery of creativity tests for children. Suggested are implications for using SOI concepts when identifying and teaching the gifted. (LH)

ABSTRACT 2951

EC 07 2951 ED N. A.
Publ. Date Sum 75 9p.
Schaefer, Charles E.
The Importance of Measuring Metaphorical Thinking in Children.
Gifted Child Quarterly ; V19 N2 P140-8

Descriptors: gifted; creative thinking; creative expression; imagination; metaphors; exceptional child education; elementary education; secondary education; writing skills; thought process;

The relationship between metaphorical thinking (the ability to associate apparently dissimilar objects or qualities) and creativity in children and adolescents is explored. Approaches for measuring metaphorical thinking (including formal testing and studying the incidence of imaginative figures of speech in students' stories) are described. It is recommended that teachers stimulate children's creative development by encouraging conscious use of metaphors, similes, and figures of speech in written compositions. (LH)

ABSTRACT 3387

EC 07 3387 ED N. A.
Publ. Date 2qtr75 13p.
Davis, Gary A.
In Frumious Pursuit of the Creative Person.

Journal of Creative Behavior; V9 N2 P75-87

Descriptors: exceptional child research; gifted; creative ability; undergraduate study; prediction; identification; personality assessment; test validity; How Do You Think Inventory;

The effectiveness of the How Do You Think (HDYT) inventory to predict creative ability in 62 undergraduate students was evaluated. The HDYT, made up of items assessing personality and biographical matters correlated with creative behavior, was administered to the 62 students enrolled in a creative thinking course. Student projects for the course were given a creative rating which were then compared with HDYT scores. Results showed a significant correlation between creative product ratings and HDYT scores.

ABSTRACT 3388

EC 07 3388 ED N. A.
Publ. Date 2qtr75 9p.
McCormack, Alan J.
Nonverbal Administration Protocols for Figural Tasks of the Torrance Tests of Creative Thinking.
Journal of Creative Behavior; V9 N2 P88-96

Descriptors: exceptional child research; gifted; primary grades; nonverbal communication; creativity; identification; divergent thinking; nonverbal tests; testing problems; Torrance Tests of Creative Thinking;

Third grade students (N-62) were given the Figural Forms Tasks of the Torrance Tests of Creative Thinking (TTCT) to determine the effect of nonverbal administration on test scores. The experimental group was given the TTCT with the customary verbal directions eliminated, and instead, instructions were pantomined for the three drawing tasks. Experimental Ss scored significantly higher than the controls in figural fluency and originality and in overall test performance. The study provided evidence that changes in administration of divergent thinking (creativity) tests can significantly influence test scores. (SB)

ABSTRACT 3649

EC 07 3649 ED N. A.
Publ. Date Aug 75 16p.
Hammaker, Michael K.; And Others
Judging Creativity: A Method for Assessing How and by What Criteria It Is Done.
Journal of Educational Psychology; V67 N4 P478-483

Descriptors: research projects; general education; creativity; creative thinking; evaluation criteria; intelligence level;

Examined in two experiments were the assumptions and processes by which judgments of creativity, intelligence, and gender are made on a written report. Ninety judges evaluated fictitious protocols to the Alternate-Uses Test. Results indicated that productivity (number of answers) influenced the ratings under all three criteria with the largest effect being on intelligence, followed by creativity. Uniqueness had an independent influence on judgments of creativity, a borderline effect on intelligence, and no significant effect on gender. (Author/CL)

ABSTRACT 3720

EC 07 3720 ED N. A.
Publ. Date Fal 75 7p.
Sussman, Gilbert; Justman, Joseph
Characteristics of Preadolescent Boys Judged Creative by Their Teachers.
Gifted Child Quarterly; V19 N3 P210-216

Descriptors: gifted; creativity; intermediate grades; individual characteristics; student evaluation; exceptional child research; teachers;

A study involving 141 boys (9 - 12 years old) was conducted to determine characteristics of creative preadolescents. Teachers rated each S on a list of 59 adjectives associated with creative individuals and on a scale of creativity. Results showed that 38 adjectives were significant in differentiating the creative and noncreative groups; and that the 34 adjectives chosen as describing creative Ss were positive or favorable in tone, while the four adjectives most frequently checked for noncreative Ss had an unfavorable connotation. (SB)

ABSTRACT 164

EC 003 863 ED
Publ. Date 69 142p.
Wallach, Michael A.; Wing, Cliff W., Jr.
The Talented Student; A Validation of the Creativity-Intelligence Distinction.
EDRS not available
Holt, Rinehart And Winston, Inc., 383 Madison Avenue, New York, New York 10017 ($3.95).

Descriptors: exceptional child research; gifted; creativity; intelligence; identification; cocurricular activities; academic achievement; college students; originality; talent identification; productive thinking; individual characteristics; cognitive processes; prediction; college admission

To investigate intelligence level, academic achievement, nonacademic achievement, ideational productivity, and the uniqueness of the ideas produced, a sample of 503 incoming freshman university students was recruited. Intelligence was measured by using students' Scholastic Aptitude Test scores; verbal and visual stimuli were used to elicit ideas. Correlations between intelligence and the number and uniqueness of ideas were low while high productivity and high uniqueness scores tended to go together. Students were divided into groups of high and low intelligence, high and low ideational productivity, and high and low ideational uniqueness. Intelligence was found to exert no effect on the generality of nonacademic accomplishments; however, the number of ideas typically produced by the student and the uniqueness of the ideas had a significant impact on nonacademic accomplishments (p less than .001 for the total group). Implications were that students who will succeed at creative writing, science, painting, or some other endeavor cannot be predicted by grades or test scores alone. Nonacademic accomplishments should be examined and credited when searching for talented students. (RJ)

ABSTRACT 1063

EC 500 970 ED N.A.
Publ. Date 69 6p.
Jacobs, John F.; Cunningham, Myron A.
Creativity and Intelligence: Their Relation to Peer Acceptance.
EDRS not available
Journal Of Special Education; V3 N3 P269-74 Fall 1969

Descriptors: exceptional child research; creativity; peer acceptance; intelligence factors; peer relationship; social relations; interpersonal competence

A test of creativity (the Uses test) and two measures of peer acceptance were administered to more than 500 elementary school children (grades 2-6). Forty male and 40 female students at each grade level within the median IQ range were selected for score analysis. Results showed that the children selected those students with higher IQ's and higher creativity as co-workers on class assignments. In social situations, however, acceptance shared a very small relationship with intelligence. Students who were classified as both highly intelligent and highly creative were not chosen by their peers as companions in social situations as often as were their low IQ-high creative or high IQ-low creative classmates. The high-high group was chosen more often than the low-low students. (RD)

ABSTRACT 1580

EC 501 049 ED N.A.
Publ. Date Apr 70 5p.
Damm, Vernon J.
Creativity and Intelligence: Research Implications for Equal Emphasis in High School.
EDRS not available
Exceptional Children; V36 N8 P565-9 Apr 1970

Descriptors: creativity research; intelligence; self actualization; high school students; mental health; intelligence tests; creative development

The possible relationships among creativity, intelligence, and self actualization were examined in 208 high school students to determine whether or not consistent self actualization scores existed for subjects high in the first two variables. Students high in both creativity and intelligence had significantly higher scores in self actualization than those obtained by students high in either creativity or intelligence. No significant difference in self actualization was found between students high in creativity only and those high in intelligence only. The results were interpreted as indicating that educational systems should stress both intellectual and creative abilities to achieve the highest level of psychological well being in students. (Author)

ABSTRACT 2006

EC 004 902 ED 036 019
Publ. Date Nov 69 23p.
Davis, Gary A. And Others
A Program for Training Creative Thinking: I. Preliminary Field Test.
Wisconsin University, Madison, Wisconsin Research And Development Center For Cognitive Learning
Office Of Education (DHEW), Washington, D. C.
EDRS mf,hc
OEC-5-10-154 TR-104

Descriptors: exceptional child research; creativity; creative ability; creative thinking; creative development; testing; comparative analysis; student attitudes; questionnaires

A program designed to develop the creative potential of sixth, seventh and eighth grade students, incorporates ideas from a three-part model which conceptualizes the components of creativity as appropriate creative attitudes, various cognitive abilities, and idea-generating techniques. It attempts to increase students' awareness of, and appreciation for, change and innovation; provide exercise for creative abilities which facilitate the fluent production of original ideas; teach techniques for the systematic production of new idea combinations; and, through humor, to create a free atmosphere encouraging spontaneity and imagination. In a preliminary field test, responses to an attitude questionnaire and three divergent production tasks (such as thinking of changes and improvements for a doorknob) showed the program to be effective. Twenty-three subjects (21 seventh and two eighth grade students) who studied the program in a 10-week creative thinking course produced 65% more ideas on the divergent thinking tasks (ideas which were rated as significantly more creative) than 32 seventh grade control Ss enrolled in a creative writing course. There also was good indication that the trained Ss acquired more creative attitudes, including confidence in their own creative ability, than the control Ss. (Author/RJ)

ABSTRACT 2321

EC 03 2321 ED N.A.
Publ. Date 68 229p.
Guilford, J. P.
Intelligence, Creativity and Their Educational Implications.
EDRS not available
Robert R. Knapp, Publisher, San Diego, California 92107 ($7.95 HC, $2.95 PB).

Descriptors: cognitive processes; intelligence level; creative thinking; creativity; conceptual schemes; educational psychology; creativity research; learning theories

Selected papers from the author's publications are grouped into three sections (Components of Intelligence, Aspects of Creativity, and Educational Implications). In Part 1, the first three papers are concerned primarily with the structure-of-intellect (SI) theory and model, while the other papers focus upon memory and some new psychological conceptions, learning theory and how SI concepts lead to new thinking about some common psychological problems, and the roles of intellectual abilities in the learning of concepts. The six papers of Part 2 concentrate upon the intellectual aspects of creativity. Discussed are factors aiding and hindering creativity, creativity in the visual arts, an informational theory of creative thinking and problem solving based on SI concepts, relations between the potential for creative thinking and measures of IQ and verbal comprehension, and trends in creativity research. In the final section, three papers offer suggestions for the field of education derived from knowledge about intellectual abilities or functions as conceived in the SI system. Considered are curriculum development, teaching of reading, and predicting achievement in ninth-grade mathematics from measures of intellectual-aptitude factors. The final triad of papers are concerned with teaching for creativity as an educational objective. (Author/KW)

ABSTRACT 1264

EC 04 1264 ED N.A.
Publ. Date 70 240p.
Shouksmith, George

Intelligence, Creativity and Cognitive Style.
EDRS not available
John Wiley and Sons, Inc., 605 Third Avenue, New York, New York 10016 ($6.50).

Descriptors: creativity; intelligence level; cognitive processes; thought processes; concept formation; problem solving; creative thinking

The integration of findings from abstract and theoretical studies of cognitive processes with those from biogenetic and practical investigations is the stated intent of the book. Emphasis is placed on the distinction between imaginative and logical reasoning as two aspects of intelligent behavior, and creativity is seen as one kind of cognitive activity. Chapters explore the investigation of cognitive functioning, the analysis of thinking, intelligence and intelligence testing, theories about intelligence, problem solving and concept formation, and cognitive styles. Also discussed are traditional psychological conceptions relating to creativity, intelligence and personality and creativity, approaches to problem solving, influence of style and bias on cognitive test performance, a factorial study of intelligence, cognitive style and creative thinking, and conclusions and implications. (RJ)

ABSTRACT 1344

EC 05 1344 ED N.A.
Publ. Date 72 2p.
Mohan, Madan; Gupta, Ram K.
Interaction of Physical Environmental Cues with Creativity and Intelligence.
EDRS not available
Proceedings, 80th Annual Convention, American Psychological Association; V7 N2 P513-4 1972

Descriptors: exceptional child research; gifted; creative ability; elementary school students; creativity; creative thinking; environmental influences; physical environment

Seven hundred nineteen high-creative and low-creative fifth graders were tested on measures of fluency, flexibility, and originality in cue-rich and cue-poor environments. Data indicated no difference in creativity, fluency, flexibility, and originality scores as a function of Ss' intelligence. It was reported that the physical differentiation of the room with cues seemed to significantly influence the high-creative group more than the low creative group on the overall creativity scores in the cue-rich environment. Cues in the physical environment significantly influenced the creativity score of the high creative group more when answering under cue-rich environment than under cue-poor environment. When the influence of two types of physical environment was assessed for the two creativity groups on fluency, flexibility, and originality scores considered separately, data indicated that, for low creative groups, the mean difference on three scores in cue-rich and cue-poor environment were statistically nonsignificant. However, the simple effects for high creative groups in two types of environment were found to be statistically significant for the three scores. Findings were thought to suggest that creative children use scanning as an additional problem solving strategy. (GW)

ABSTRACT 1416

EC 05 1416 ED N.A.
Publ. Date Mar 73 3p.
Schubert, Daniel S. P.
Intelligence as Necessary but not Sufficient for Creativity.
EDRS not available
Journal of Genetic Psychology; V122 P45-7 Mar 1973

Descriptors: research projects; gifted; creative ability; handicapped males; creativity; creativity research; creative expression; intelligence level; correlation

Scores on the Army General Classification Test (AGCT) were correlated with scores on the Creative Imagination Test (CIT) for 176 men who were divided into two groups of differing intelligence, one whose members scored below 90 on the AGCT, and one whose members scored above 110 on the AGCT. Results supported the prediction of a closer correspondence of intelligence and creativity scores in a low intelligence range than in a high intelligence range. Intelligence was unrelated statistically to creativity when only the high intelligence range was considered. J. Guilford's triangular scatterplot conceptualization of the intelligence-creativity relationship was found to be most congruent with the present and earlier data. Intelligence was described as allowing the development of creativity, but not insuring such development. Noted was the possible importance of personality and environmental factors in creativity expression at upper intelligence ranges. (Author)

ABSTRACT 1757

EC 05 1757 ED N.A.
Publ. Date May 73 7p.
Aliotti, Nicholas C.; Blanton, William E.

Creative Thinking Ability, School Readiness, and Intelligence in First Grade Children.
EDRS not available
Journal of Psychology; V84, 1 P137-43 May 1973

Descriptors: exceptional child research; gifted; creative ability; elementary school children; primary grades; verbal ability; language ability; nonverbal ability; readiness (mental); intelligence level; diagnostic tests; test interpretation; correlation; sex differences

Eighty-three first grade children (46 males and 37 females) were examined to investigate the relationships among figural and verbal creative thinking abilities, language and nonlanguage intelligence, and school readiness. A test battery of the Torrance Tests of Creative Thinking (Figure and Verbal Forms A), the Metropolitan Readiness Tests (Form A), California Test of Mental Maturity (revised, 1963), and the Picture Interpretation Test (currently under development) was administered. Through varimax rotations of the correlation matrix, a three factor solution resulted, which was identified by relatively clear and high loadings for figural creativity, verbal creativity, and intelligence-school readiness. Interpretation revealed that the factors of verbal and figural creativity as defined by the Torrance tests were each independent of ther other; that general intelligence, school readiness and picture interpretation emerged as a third and independent factor; that the patterns prevailed for both males and females; and that failure of verbal creativity measures to contribute to the school readiness-intelligence and figural creativity factors was an incongruous finding. (MC)

ABSTRACT 332

EC 07 0332 ED N.A.
Publ. Date Sum 74 12p.
Carroll, James L.; Laming, Lester R.
Giftedness and Creativity: Recent Attempts at Definition: A Literature Review.
Gifted Child Quarterly; V18 N2 P85-96 Sum 1974

Descriptors: exceptional child education; gifted; literature reviews; research reviews (publications); identification; definitions;

The literature review focuses on books, articles, tests, and research from 1962-71 which deal with the identification and definition of giftedness. Research findings are summarized according to the study population, the researcher, and the measurements used. For instance, it is reported that a histriometric study of 301 eminent men and women born between 1450 and 1850 showed that both nature and nurture foster eminence and that eminence is characterized by high IQ, persistence, and confidence. (GW)

ABSTRACT 2977

EC 07 2977 ED N. A.
Publ. Date 1qtr75 16p.
Trachtman, Leon E.
Creative People, Creative Times.
Journal of Creative Behavior ; V9 N1 P35-50

Descriptors: general education; creativity; biological influences; environmental influences; social attitudes;

Discussed is the creative process and detailed are biological and environmental influences affecting creativity. Creativity is differentiated from intelligence and the categories of work and play are analyzed. It is explained that certain environmental factors (including affluence, societal faith in progress, and belief in the ultimate meaningfulness in life) are necessary for the development of creativity. (CL)

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